

Dr. Peterson

Next Generation Manufacturing Event

Tuesday, Oct. 16, 2012, Historic Academy of Medicine

- Thank you Richard (Kopelman). And to all of you from the Manufacturing sector, welcome to Georgia Tech and the 2nd Annual Next Generation Manufacturing event. Today's event is designed to provide a forum to highlight some of the methods for manufacturing success and the vital role that technology and innovation play in advancing this important sector for our economy.
- Not only is manufacturing one of the cornerstones of the U.S. economy, it also accounts for more than 90 percent of Georgia's exports. Georgia and the Southeast are increasingly becoming a high-tech manufacturing hub. Who would have guessed 20 years ago that all BMW X3s would be exported from the Southeast, in addition to being the home of major manufacturing operations for companies like NCR, KIA, Southwire, Catapillar and John Deere?
- It is an exciting time of innovation. You may have seen the YouTube video from April 2011 about a company in the UK, EADS Innovation Works, that made a working bicycle with additive manufacturing. They were trying to demonstrate that the machine using laser technology and powders to make specialized engineered parts could make something intricate that could be used everyday. The bicycle is primitive, but workable. I was interested to read the comments online about the story. One person posted: "You're assuming that what you see in this video is the best that will ever be possible. It's sort of like somebody in 1987 saying 'Why would I want one of these cell phones that you can't use in so many places anyway, they cost thousands, are as big as a brick, and besides there are so many phone booths around, who needs that?' And in 1987 that was true. But it didn't stay like that."
- Just this month WIRED Magazine featured an 86-year-old industrial design firm, Teague, that created a set of headphones you print yourself. The headphones include 9 3D-printed parts (downloadable at [Thingiverse](#)) and a handful of electronic components: two drivers, a couple of RCA jacks, and some wires and springs. The design was purposefully kept simple to make it easier to assemble and recycle.

- At Georgia Tech we're designing the future, and educating and equipping innovators to succeed. Tech is home to some of the best engineering, manufacturing, and logistics programs in the world.
- By taking advantage of the synergy in this innovative ecosystem and working closely with industry and government, Georgia Tech is leading the drive toward a "manufacturing renaissance." Our programs in manufacturing technology span research, education and outreach. We offer numerous ways for you to interact with Georgia Tech. For example, Tech's Enterprise Innovation Institute (EI₂), your host today, provides a comprehensive array of services designed to help manufacturers improve their ability to compete in world markets. These outreach services assistance in product development, continuous improvement or Lean Manufacturing, quality systems, and sustainability. EI₂ can also help you connect with the numerous manufacturing related research centers at Georgia Tech.
- Georgia Tech's is developing the scientific and technological tools and processes that will fuel the next generation of world-class manufacturers in Georgia. This work includes advancement in vision systems, advanced robotics, micro and nanoscale manufacturing, additive manufacturing, bio-fuels and bio-materials, to name a few. The Georgia Tech Manufacturing Institute is creating "collaboratories" that serve as innovation pilot plants and prototype shops, bringing together specialists from academia, industry, and government to work together, creating technology proving grounds and workforce training centers. You will have an opportunity to tour the Georgia Tech Manufacturing Institute this afternoon, as well as the Global Center for Medical Innovation, and our new Invention Studio for students. We are committed to expanding our collaborative work in these areas with industrial partners like you.
- We are pleased to be your host today and look forward to working with you on advancing next generation manufacturing and helping to sustain U.S. economic competitiveness in the 21st century.